



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
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## PURCHASE ORDER

Purchase Order ID PO23695

Purchase Order Date 4/8/2014

PO Print Date 4/8/2014

Page Number 1 of 1

Order From :

VC-CHE001

Ship To : DART AEROSPACE LTD

CHEMETALL CANADA LIMITED  
P.O. BOX 46186  
POSTAL STATION A  
TORONTO, ON M5W 4K9  
CA

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

CL 4/10/14

Contact Name

Vendor Phone 877-311-1471

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Ship To Contact

Terms

Net 30

Ship To Phone

Currency

CAD

Ship Via:

Purolator ground collect

FOB

Destination-Collect

Ship Acct:

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
71400-40		OKT-2205-H GORDOTEST INDICATOR 155	4/11/2014 Yes 4/11/2014 18		1.00 Each	\$14.97	\$14.97
Line Total:							\$14.97
Deliver To: GARY							
71400-40		OKT-6089-K GARDOTEST SOLUTION 201.0.5N SODIUM	4/11/2014 Yes 4/11/2014 18		1.00 Each	\$27.53	\$27.53
Line Total:							\$27.53
Deliver To: GARY							
PO Total:							\$42.50

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Change Nbr: 1

Change Date: 4/8/2014

# Chemetall

675 Central Avenue, New Providence, NJ 07974, (908)464-6900  
Emergency Telephone No.: (800) 255-3924

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

**Environmental Precautions** No information available.

**Methods for Containment and Clean Up:** Absorb with suitable material. Always obey local regulations.

## Section 7 – Handling and Storage

**Handling:** Wash hands after handling. Avoid contact with skin and eyes.

**Storage:** Protect from freezing and physical damage.

## Section 8 – Exposure Controls, Personal Protection

Bromophenol Blue, Sodium Salt, CAS# 62625-28-9, ACGIH TLV: NA, OSHA PEL: NA

Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

**Engineering Measures/ General Hygiene:** : Normal ventilation is adequate. Ensure eyewash and safety showers are available.

**Personal Protection Equipment: Skin Protection:** Chemical resistant gloves.

**Eye/Face Protection:** Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate.

## Section 9 – Physical and Chemical Properties

**Appearance/Physical State:** Dark Red-Purple Liquid

**Odor:** Odorless

**% Volatility:** No Information Available

**Boiling Point:** Approx 100C

**Specific Gravity:** Approx 1

**Melting Point:** Approx 0 C

**Vapor Pressure:** No Information Available

**Vapor Density:** No Information Available

**Flash Point:** Not Applicable

**Evaporation Rate:** No Information Available

**Coefficient of water/oil distribution:** Not Available

**pH:** No Information Available

**Odor Threshold:** Not Available

**Flammability:** No Information Available

**Decomposition Temperature:** No Information Available

**Solubility:** Infinite

**Partition Coefficient n-octanol/water:** No data available

**Relative Density:** No Information Available

**Molecular Weight:** Not available

## Section 10 – Stability and Reactivity

**Chemical Stability:** Stable under normal conditions of use and storage.

**Incompatible Materials** None identified.

**Conditions to Avoid:** No Information Available.

**Hazardous Decomposition Products:** None Expected

**Hazardous Polymerization:** Does not occur

**Hazardous Reactions:** None under normal processing.

## Section 11 – Toxicological Information

**Routes of Exposure/Symptoms/Corrosiveness** – See Section 2

LD50 orl-rat: NA

LC50 inhalation-rat: NA

**Irritation:** No Information Available

**Toxicologically Synergistic:** No Information Available

### Chronic Exposure

**Carcinogenicity** No information available.

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Reproductive Effects** No information available.

**Developmental Effects (Immediate/Delayed)** No information available.

**Teratogenicity** No information available.

**Other Adverse Effects** No Information Available.

**Endocrine Disruptor Information** No information available

## Section 12 – Ecological Information

**Ecotoxicity:** Not Available.

**Persistence and Degradability:** No Information Available **Mobility:** No Information Available

**Bioaccumulation/ Accumulation:** No Information Available

## Gardotest Indicator 155 Bromophenol Blue Indicator

### Section 1 – Chemical Product and Company Identification

Catalog Number: OKT-2205-G, OKT-2205-H, OKT-2205-J, OKT-2205-K, OKT-2205-L, OKT-2205-M, OKT-2205-N  
Product Identity: Gardotest Indicator 155, Bromophenol Blue Indicator

**Chemical Family:** Not Applicable

**Synonyms:** Not Applicable

**Recommended Use:** Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291  
Emergency Contact Number (24hr): Chemtel (800) 255-3924

**Issue Date:** 12/27/06

**Revision Date:** 06/05/08, 06/14/10, 02/19/12, 08/22/13

### Section 2 – Hazard Identification

**Emergency Overview:** Non-flammable, non-corrosive, non-toxic. Does not present significant health hazards. Wash areas of contact with water.

**Appearance:** Dark Red-Purple Liquid

**Odor:** Odorless

**Target Organs:** Eyes, skin.

**Potential Health Effects/ Routes of Exposure:**

**Eyes:** May cause slight irritation.

**Skin:** May cause slight irritation.

**Ingestion:** Large doses may cause upset stomach

**Inhalation:** Not likely to be a hazard

**Chronic Effect / Carcinogenicity:** None (IARC, NTP, OSHA)

**Aggravated Medical Conditions** No information available

These chemicals are not considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

### Section 3 – Composition, Information on Ingredients

Bromophenol Blue, Sodium Salt, CAS# 62625-28-9, 0.04% w/v

Water, purified, CAS# 7732-18-5, >99% w/v

### Section 4 – First Aid

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

**Skin:** Flush with water for 15 minutes. Get medical assistance if irritation develops.

**Ingestion:** Dilute with water or milk. Get medical assistance.

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

**Notes to Physician** Treat symptomatically.

### Section 5 – Fire Fighting Measures

**Flash Point:** Not Applicable **Autoignition Temperature** No information available.

**Explosion Limits Upper** No data available **Lower** No data available

**Extinguishing Media:** Use means suitable to extinguishing surrounding fire.

**Unsuitable Extinguishing Media:** No information available

**Fire & Explosion Hazards:** Not considered to be a fire or explosion hazard.

**Fire Fighting Instructions / Equipment:** Use normal procedures. Poisonous gases may be produced in fire. Use protective clothing. Use NIOSH-approved breathing equipment.

**Hazardous Combustion Products:** Irritating and toxic fumes and gases may be produced during combustion or thermal decomposition.

**Sensitivity to mechanical impact** No information available.

**Sensitivity to static discharge** No information available.

**Specific Hazards Arising from the Chemical:** No information available

**NFPA Rating:** (estimated) Health: 1; Flammable: 0; Reactivity: 0

### Section 6 – Accidental Release Measures

# Chemetall

675 Central Avenue, New Providence, NJ 07974, (908)464-6900  
Emergency Telephone No.: (800) 255-3924

## Section 13 – Disposal Considerations

**Waste Disposal/Waste Disposal of Packaging:** Absorb with suitable material.

All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

## Section 14 – Transport Information

**DOT - Not Regulated**

## Section 15 – Regulatory Information (not meant to be all inclusive)

**OSHA Status:** These chemicals are not considered hazardous by OSHA.

**Canada DSL:** These chemicals are listed on Canada's DSL list.

**TSCA:** The components of this solution are listed on the TSCA Inventory

**SARA Title III Section 313:** Not Applicable

**RCRA Status:** Not Applicable

**CERCLA Reportable Quantity:** Not Applicable

**WHMIS:** Not Applicable

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

## Section 16 – Additional Information

HMIS Ratings:

Health: 1 Flammability: 0 Reactivity: 0

Protective Equipment: B (Protective Eyewear, Gloves)

MSDS Prepared by: Matt Nelson

**Disclaimer:** The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.

# Receiving Report

Date: 1/4/18

Batch No: M128892

Supplier: CUMMINS

Dart P/O: 23890

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☒  
 New Supplier Yes ☐ No ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐  
 Waybill Attached: Yes ☐ No ☒  
 Shipment Complete: Yes ☒ No ☐ N/A ☐  
 QC18 Inspection ☐ N/A ☒  
 Work Order ☐ N/A ☐

## Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number

Initials of Receiver

QC12

Production/Admin:

Date

Received/Costing

Initial

Location

## Gardotest Solution 23 Sodium Hydroxide 0.5N

### Section 1 – Chemical Product and Company Identification

Catalog Number: OKT-6089-G, OKT-6089-H, OKT-6089-J, OKT-6089-K, OKT-6089-L, OKT-6089-M, OKT-6089-N  
Product Identity: Gardotest Solution 23, Sodium Hydroxide 0.5N

**Chemical Family:** Alkali

**Synonyms:** Caustic Soda

**Recommended Use:** Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331  
Emergency Contact Number (24hr): Chemtel (800) 255-3924

**Issue Date:** 12/28/06

**Revision Date:** 07/09/08, 01/12/12, 02/17/12, 04/11/13

### Section 2 – Hazard Identification

#### **Emergency Overview**

Mildly corrosive, non-flammable, non-toxic. May cause mild irritation to areas of contact. Contact a physician if irritation develops.

**Appearance:** Clear, colorless liquid

**Odor:** Odorless

**Target Organs:** respiratory system, eyes, skin.

**Potential Health Effects/ Routes of Exposure:**

**Eyes:** May cause irritation and burns.

**Skin:** May cause irritation and burns.

**Ingestion:** May cause mild burns of the mouth, throat, and stomach. Symptoms may include bleeding, vomiting, diarrhea, fall in blood pressure.

**Inhalation:** May cause mild irritation.

**Chronic Effect / Carcinogenicity:** Prolonged or repeated skin contact may cause dermatitis. (IARC, NTP, OSHA)

**Aggravated Medical Conditions** No information available

These chemicals are considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

### Section 3 –Composition, Information on Ingredients

Sodium Hydroxide, CAS# 1310-73-2, 2% w/v

Water, purified, CAS# 7732-18-5, 98% w/v

### Section 4 – First Aid

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

**Skin:** Flush with water for 15 minutes. Get medical assistance if irritation develops.

**Ingestion:** DO NOT induce vomiting. Dilute with water. Get medical assistance.

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

**Notes to Physician** Treat symptomatically.

### Section 5 – Fire Fighting Measures

**Flash Point:** Not Applicable **Autoignition Temperature** No information available.

**Explosion Limits Upper** No data available **Lower** No data available

**Extinguishing Media:** Any means suitable for extinguishing fire.

**Unsuitable Extinguishing Media:** No information available

**Fire & Explosion Hazards:** Not considered to be a fire or explosion hazard.

**Fire Fighting Instructions / Equipment:** Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.

**Hazardous Combustion Products:** No information Available

**Sensitivity to mechanical impact** No information available.

**Sensitivity to static discharge** No information available.

**Specific Hazards Arising from the Chemical:** Thermal decomposition can lead to release of irritating gases and vapors

**NFPA Rating:** (estimated) Health: 1; Flammable: 0; Reactivity: 0

# Chemetall

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## Section 6 – Accidental Release Measures

**Personal Precautions** Use proper personal protective equipment as indicated in Section 8.

**Environmental Precautions** Do not let this chemical enter the environment.

**Methods for Containment and Clean Up** Collect liquid and dilute with water. Neutralize with dilute acid solutions. Decant water to drain with excess water. Absorb with suitable material. Dispose of remaining solid as normal refuse. Always obey local regulations.

## Section 7 – Handling and Storage

**Handling:** Wash hands after handling. Avoid contact with skin and eyes. Do not mix with acids.

**Storage:** Keep container tightly closed. Store with corrosives. Protect from freezing and physical damage.

## Section 8 – Exposure Controls, Personal Protection

Sodium Hydroxide, CAS# 1310-73-2, ACGIH TLV: 2 mg/m<sup>3</sup>, OSHA PEL: 2mg/m<sup>3</sup>

Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

**Engineering Measures/ General Hygiene:** Normal ventilation is adequate. Ensure eyewash and safety showers are available.

**Personal Protection Equipment: Skin Protection:** Chemical resistant gloves.

**Eye/Face Protection:** Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate

## Section 9 – Physical and Chemical Properties

**Appearance/Physical State:** Clear, colorless liquid

**Odor:** Odorless

**Boiling Point:** Approx 100C

**Melting Point:** Approx 0C

**Vapor Density:** >1

**Evaporation Rate:** Not Available

**pH:** Alkaline

**Flammability:** No Information Available

**Solubility:** Infinite

**Relative Density:** No Information Available

**% Volatility:** No Information Available

**Specific Gravity:** Approx 1

**Vapor Pressure:** 14mmHg @ 20C

**Flash Point:** Not Applicable

**Coefficient of water/oil distribution:** Not Available

**Odor Threshold:** Not Available

**Decomposition Temperature:** No Information Available

**Partition Coefficient n-octanol/water:** Not Available

**Molecular Weight:** Not Available

## Section 10 – Stability and Reactivity

**Chemical Stability:** Stable under normal conditions of use and storage.

**Incompatible Materials:** Acids, organic halogen compounds, metals such as aluminum, tin and zinc.

**Conditions to Avoid:** Incompatible materials, excess heat

**Hazardous Decomposition Products:** Oxides of sodium, decomposition by reaction with certain metals releases flammable and explosive hydrogen gas.

**Hazardous Polymerization:** Does not occur

**Hazardous Reactions:** Not Available

## Section 11 – Toxicological Information

**Routes of Exposure/Symptoms/Corrosiveness** – See Section 2

LD50 orl-rat: NA LC50 inhalation-rat: NA

**Irritation:** No Information Available

**Toxicologically Synergistic:** No Information Available

### Chronic Exposure

**Carcinogenicity** There are no known carcinogenic chemicals in this product

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Reproductive Effects** No Information available.

**Developmental Effects (Immediate/Delayed)** No information available.

**Teratogenicity** No information available.

**Other Adverse Effects** No information available.

**Endocrine Disruptor Information** No information available

## Section 12 – Ecological Information

**Ecotoxicity:** Sodium Hydroxide has high acute and chronic toxicity to aquatic life, influenced by hardness and alkalinity of the receiving water. Do not empty into drains.

# Chemetall

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**Persistence and Degradability:** No Information Available    **Mobility:** No Information Available  
**Bioaccumulation/ Accumulation:** No Information Available

## Section 13 – Disposal Considerations

**Waste Disposal/Waste Disposal of Packaging:** Neutralize with dilute acid solutions.

All chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

## Section 14 – Transport Information

**DOT – DOT – UN1824, Sodium Hydroxide Solution, 8, II**

## Section 15 – Regulatory Information (not meant to be all inclusive)

**OSHA Status:** These chemicals are considered hazardous by OSHA.

**Canada DSL:** CAS# 7732-18-5 & 1310-73-2 are listed on Canada's DSL list.

**TSCA:** The components of this solution are listed on the TSCA Inventory

**SARA Title III Section 313:** Not Applicable

**RCRA Status:** Not Applicable

**CERCLA Reportable Quantity:** Sodium Hydroxide – 1000lbs.

**WHMIS:** E: Corrosive Material

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

## Section 16 – Additional Information

HMIS Ratings:

Health: 2 Flammability: 0 Reactivity: 0

Protective Equipment: B (Protective Eyewear, Gloves)

MSDS Prepared by: Matt Nelson

**Disclaimer:** The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.